



COMPUTER SCIENCE

in

ARKANSAS



DIGITAL DESIGN: INNOVATIVE CODING THROUGH EMBROIDERY

Digital Design: Innovative Coding Through Embroidery made its first appearance in Arkansas in January. During this past spring, the training was presented in five educational cooperatives across the state, training over 150 teachers and placing over 100 embroidery machines in the hands of students and teachers. We are excited to announce that this training is being offered again this year. The first session is scheduled for October 22, 2019 at Northeast Educational Cooperative. CTE teachers may be eligible for Perkins funding to cover equipment costs if the equipment will be used in an approved program of study.

During this session, participants will have the opportunity to explore a different tool that can be used to reach students who might not be engaged with traditional tools. Through a unique and innovative experience using Turtlestitch, a free online graphical coding environment, participants will learn innovative coding through embroidery and create a custom embroidery product to take home. Coding and Embroidery will allow educators to reach a diverse audience drawing on an artistic and creative approach to coding. For registration information visit <http://bit.ly/ARCSPD>. If you would like additional information, email tammy.glass@dawsonesc.com.

FALL CODING TOUR VISITS

Governor Asa Hutchinson continued his coding tour this fall visiting the following schools: Midland, Armorer, Calico Rock, Foreman, Sylvan Hills Middle School, Lonoke, Eureka Springs, and Mulberry. Governor Hutchinson said, "This is my ninth computer science tour, and it seems like the teachers' and students' enthusiasm for computer science increases each and every tour." Since the tours inception, the governor has visited more than 70 schools in Arkansas in an effort to increase the awareness and understanding that computer science helps build the skill set our students need for industries and our economy.

Governor Hutchinson said, "Computer science and tech innovation have become a movement throughout Arkansas in the past four years, and I look forward to what this next year will bring as we continue to lead the nation in computer science education."

Currently there are over 500,000 jobs available to those with a background in computer science. The governor is carrying that message to our youth and hoping they get the import that computer science leads to a great career and a workforce trained in CS is the foundation for a technology driven economy. In response to this, the governor has increase the stipends for teachers to teach computer science. Click [here](#) for more information!



UPCOMING EVENTS

- Fall High School CS and Certification Preparation Day 1-5
- Digital Citizen Week - Oct. 14-18
- AP CSP Student Day - Oct. 21st



CS SPECIALIST SPOTLIGHT

Each month our plan is to highlight one of the specialists on our CS team so teachers, students, and staff have a chance to get to know our team.

Kelly Griffin, Lead CS Specialist, has been in education for 10 years and has a Bachelor of Science in Natural Science and a Masters of Arts in Teaching. Griffin said, "I knew in high school that I wanted to work in education. I enjoy science and wanted to take that love to the high school science classroom. However, I still had an interest in computers so I chose a minor in computer science. Through pre-engineering, I was able to teach science and computer science concepts. As tasks were presented, I was able to help students see math, science and computer science skills involved in solving the problem, this was my new favorite class." During her years as an educator, she worked for both Drew Central and the Monticello School Districts teaching: Physical Science, Chemistry, Physics, Intro to Engineering, Principles of Engineering, and Civil Engineering. In addition to teaching, she was the VEX Robotics Coach and Event Partner. She stated, "I have a love for robotics. As a robotics coach, I watched students share their talents, develop new friendships, overcome fears, learn new skills and, for some, start to believe in themselves. There are many real world skills learned through a robotics program - computing, collaboration, communication, problem-solving, and perseverance."

While on staff with us, she has presented at the Arkansas Education Association (AEA), Arkansas School Board Association (ASBA), Arkansas Curriculum Conference (ACC), and the Digital Alliance Midsouth Summit (DAMS). Serving as the lead specialist has given her an opportunity to work with several other state leaders, such as Code.org, CSTA State CS Policy Forum, CSforAll Summit, Expanding Computing Education Pathways, and the CEdCon. When asked why she loved computer science, Griffin said, "One of my favorite moments is when students are able to see their design come to life. After researching, planning, designing, building, and writing programs my students were determined to complete the task. The level of excitement and pride in the room once they complete the task is hard to explain."



Kelly Griffin (right) modeling Botley with teachers at a K-8 Lead professional development session.

VIRTUAL REALITY RE-TRAIN TOURS

Virtual Reality has ruled the month of September across the state of Arkansas. With the release of the VR component in CrashCourse, created in Unity by TeachAide, teachers across the state have attended professional development designed to update the VR computers in their classrooms.

Teachers discussed the need to keep all aspects of the VR system up to date, including the Oculus headset, the OS, GeForce drivers, and Ricoh Theta camera firmware. If you get a chance you should stop by your school's VR teacher and ask to view the VR CrashCourse unit. The VR training session was hosted in eight of the state's fifteen cooperatives and attended by over 60 schools.

Useful links:

[CrashCourse](#)

[Learning Unity with a CS Specialist](#)

[VR Training questions](#)



MASTER THE MAINFRAME

Registration is now open for IBM's 15th Annual Master the Mainframe Contest. This global contest, which runs until December 31st, is open to high school and college students. Students gain skills needed for the job market in programming and application tasks within the following platforms: C, COBOL, DB2, Java, JCL Programming, and Rexx.

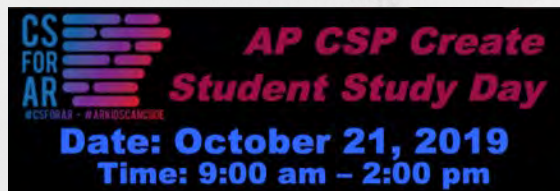
This competition is separated into 3 parts. The first part is to provide participants mainframe fundamentals. The second part is to expand on this information by developing coding skills for the languages the mainframe requires. Finally, the last part puts all of these skills to the test, and by test, we mean a real-world scenario. Participation and achievement provide digital badges, and possibly, some awesome prizes.

For more information please visit: <https://masterthemainframe.com/>



AP CSP STUDENT DAY

In AP Computer Science Principles (AP CSP), students cultivate their understanding of computer science through working with data, collaborating to solve problems, and developing computer programs as they explore concepts like creativity, abstraction, data and information, algorithms, programming, the internet, and the global impact of computing. As part of the AP CSP course, students are required to complete two Performance Tasks: Explore and Create and a written test. The AP CSP Student days are set up to help students break down the Performance Task. In 2018 Arkansas had 10 schools and 60 students participate in AP Computer Science Principles Create Student Day. Again, this year, the Computer Science Specialist team will be offering AP CSP Student Days. The main session will be at Dawson, but there will be live feeds at Southwest, Southeast, Northwest, Northeast and Arch Ford co-ops. There will also be an at-large online option.



Student days have been set for October 21, 2019 for the Create Task and February 10, 2020 for the Explore Task. Registration for the Create Day is available at <http://bit.ly/2019APCSPCREATE>. For more information, email tammy.glass@dawsonesc.com.

EXPLORE SUCCESS

More than one thousand students attended the Explore Success Event on September 24 at Hempstead Hall in Hope, Arkansas. This event was a career pathway exploration event for 8th graders and was the culmination of work between Southwest, Southcentral, and DeQueen Mena Educational Cooperatives, area industries, and the Southwest Arkansas Development Alliance.

Paul Vitale, the keynote motivational speaker, addressed the students and discussed a “student playbook” to help them prepare and discuss career goals. This event also had several breakout sessions for students to attend such as: Manufacturing & Industry Leaders’ Panel, Mobile Unit Tours, Soft Skills Training, and Career & College Fair. Leslie Savell, CS Specialist, worked in conjunction with SATA and New Millennium, to provide classroom packs for door prizes for the students that included: Sphero minis, Microbit, Kindle Fire tablet, gravity maze and several coding books for their teachers.

Students were able to experience the coding packs before the giveaway during the college and career fair, as well as hear from industries the need for technical and coding skills on the job.



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